

Appl. No. 10/554,302
Docket No. Z07865Q
Amdt. dated 28 March 2011
Reply to Office Action mailed on 19 January 2011
Customer No. 27752

REMARKS

Claim Status

Claims 1, 4, 7, 8, 10-14, 17, 19, 20 and 21 are pending in the present application.

Rejection Under 35 U.S.C. §103(a) Over U.S. Pat. No. 2,306,256 (Wickwire Jr., et al.) in view of US. Pat. No. 3,817,172A1 (Horton)

Claims 1, 7, 8, 10-14 and 19-21 are rejected under 35 U.S.C. §103(a) as being unpatentable over Wickwire in view of Horton.

Applicants respectfully traverse the rejection. The Office Action states Wickwire does not teach a plastic-coated outer stamping surface; and transmitting corresponding electric data signals from a sensor to an electronic evaluation device that adjusts heating power based on the data transmitted from the sensor. It has been held that mere automation of a manual activity is not sufficient to patentably distinguish an invention over the prior art. See MPEP § 2144.04(III).

The Office Action goes on to allege:

That one having ordinary skill in the art would recognize that given a required predetermined preheating temperature for each specific article to be impressed, the following functions are critical to proper preheating of an article to the predetermined temperature: identification of each article or each batch of articles; selection of the proper predetermined preheating temperature for the identified object; and operation of the preheating means at the proper power level for the proper time to achieve preheating of the article to be impressed to the proper temperature. One having ordinary skill in the art would also know that a simple lookup table, for example, could be generated, which table would list each item with a corresponding predetermined preheat temperature, power setting, and preheat time, and further, that an operator would perform identification of the article and evaluation of the proper data from the lookup table to properly operate the preheating apparatus, the identification being based upon the color of an object, the material type of an object, or other physical characteristics of the object that would indicate to the observer the type of object.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Wickwire by automating the identification of the article to be impressed and the subsequent setting and operation of the preheating mechanism,

including the steps of transmitting corresponding electric data signals indicative of the sensed characteristic from a sensor to an electronic evaluation device that subsequently adjusts a heating power of the heating device based, at least in part, on the characteristic data transmitted from a sensor, because such automation would predictably and advantageously achieve the same result as a manual identification process, but with a likely decrease in the time required to perform the steps, as well as an increase in accuracy, which decrease in time and increase in accuracy may serve to increase the overall throughput of the process.

The Office Action's use of MPEP § 2144.04(III) "AUTOMATING A MANUAL ACTIVITY" in the obvious rejection is incorrect. MPEP § 2144.04(III) cites the case *In re Venner*.¹, which held that "It would be considered obvious for any person in the piston molding art to equip the multiple mold apparatus thus defined by the claims of Venner et al. with time controlled means to withdraw the middle core section after a predetermined period for solidification, in accordance with the disclosures of the secondary references²." In support of its judgment the court reasoned, "*The timer itself does not compute the molding period. A mental process is invoked and the timer is set accordingly*".³ Therefore the court reasoned the timing step was obvious because the calculation for the step was done by a human outside the claimed method and the timer adjusted accordingly. This contrasts with the claimed steps of the present invention, wherein one of the steps involves, "sensing a characteristic of the work piece surface by means of a sensor, wherein the characteristic is selected from the group consisting of color, roughness, and material type, and transmitting corresponding electric data signals indicative of the of the sensed characteristic from the sensor to an electronic evaluation device that subsequently adjusts a heating power of a work piece surface heater based, at least in part, on the sensed characteristic data transmitted from a sensor.

Therefore, the present invention is not an automated manual step as in *In re Venner*, but rather involves a sensor determining the type of work piece and surface texture of the work piece and transmitting the data to an evaluation device that calculates the corresponding quantity of heat and controls the heating device." (Spec. page, lines 23-30)

¹ 262 F.2d 91, 95, 120 USPQ 193, 194 (CCPA 1958).

² *Id.* at 96.

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In *In re Venner* the actual computations were done by a human and then a timer was used to enact those computations. In the method of the present invention the sensors make determinations about the work piece and the evaluation device calculates the amount of heat needed and acts to provide the heat.

The addition of Horton does not cure the deficiencies of Wickwire.

In view of the above Applicants respectfully submit claims 1, 7, 8 10-14 and 19-21 are not obvious in view of Wickwire and Horton.

Rejection Under 35 U.S.C. §103(a) Over U.S. Pat. No. 2,306,256 (Wickwire Jr., et al.) in view of US. Pat. No. 3,817,172A1 (Horton) and further in view of U.S. Pat. No. 3,791,290 (Colledge)

Claims 4 and 17 are rejected under 35 U.S.C. §103(a) as being unpatentable over Wickwire in view of Horton and Colledge.

Applicants respectfully traverse the rejection. The Office Action states Wickwire does not teach a plastic-coated outer stamping surface; and transmitting corresponding electric data signals from a sensor to an electronic evaluation device that adjusts heating power based on the data transmitted from the sensor. It has been held that mere automation of a manual activity is not sufficient to patentably distinguish an invention over the prior art. See MPEP § 2144.04(III).

The Office Action goes on to allege:

That one having ordinary skill in the art would recognize that given a required predetermined preheating temperature for each specific article to be impressed, the following functions are critical to proper preheating of an article to the predetermined temperature: identification of each article or each batch of articles; selection of the proper predetermined preheating temperature for the identified object; and operation of the preheating means at the proper power level for the proper time to achieve preheating of the article to be impressed to the proper temperature. One having ordinary skill in the art

³ *Id.* at 95.

would also know that a simple lookup table, for example, could be generated, which table would list each item with a corresponding predetermined preheat temperature, power setting, and preheat time, and further, that an operator would perform identification of the article and evaluation of the proper data from the lookup table to properly operate the preheating apparatus, the identification being based upon the color of an object, the material type of an object, or other physical characteristics of the object that would indicate to the observer the type of object.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Wickwire by automating the identification of the article to be impressed and the subsequent setting and operation of the preheating mechanism, including the steps of transmitting corresponding electric data signals indicative of the sensed characteristic from a sensor to an electronic evaluation device that subsequently adjusts a heating power of the heating device based, at least in part, on the characteristic data transmitted from a sensor, because such automation would predictably and advantageously achieve the same result as a manual identification process, but with a likely decrease in the time required to perform the steps, as well as an increase in accuracy, which decrease in time and increase in accuracy may serve to increase the overall throughput of the process.

The Office Action's use of MPEP § 2144.04(III) "AUTOMATING A MANUAL ACTIVITY" in the obvious rejection is incorrect. MPEP § 2144.04(III) cites the case *In re Venner*.⁴, which held that "It would be considered obvious for any person in the piston molding art to equip the multiple mold apparatus thus defined by the claims of Venner et al. with time controlled means to withdraw the middle core section after a predetermined period for solidification, in accordance with the disclosures of the secondary references⁵." In support of its judgment the court reasoned, "*The timer itself does not compute the molding period. A mental process is invoked and the timer is set accordingly*".⁶ Therefore the court reasoned the timing step was obvious because the calculation for the step was done by a human outside the claimed method and the timer adjusted accordingly. This contrasts with the claimed steps of the present invention, wherein one of the steps involves, "sensing a characteristic of the work piece surface by means of a sensor, wherein the characteristic is selected from the group consisting of color, roughness, and material type, and transmitting corresponding electric data signals indicative of the of the sensed characteristic from the sensor to an electronic evaluation

⁴ 262 F.2d 91, 95, 120 USPQ 193, 194 (CCPA 1958).

⁵ *Id.* at 96.

⁶ *Id.* at 95.

